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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/814,019

03/31/2004

Andrei Leonida

67010-072; H2715-SS

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EXAMINER

CREPEAU, JONATHAN

ART UNIT

PAPER NUMBER

1745

MAIL DATE

DELIVERY MODE

06/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/814,019

Applicant(s)

LEONIDA ET AL.

Examiner

Jonathan S. Crepeau

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 11-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>3/31/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I, claims 1-10 in the reply filed on June 4, 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Objections

2. Claim 4 is objected to because of the following informalities: "said adhesive tape" lacks proper antecedent basis, and it appears that claim 4 should depend on claim 3. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 5-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Mao et al (U.S. Patent 6,989,214). In Figures 3a and 3b, the reference teaches an electrochemical cell

structure comprising first and second conductive members (82, 84). The first member comprises a protrusion (82a) on the periphery thereof and the second member comprises a corresponding volume (84a) on the periphery thereof. A securing member (insulator 89) is disposed between the volume and the protrusion. As shown in Figure 1b, the conductive members have openings for conducting fluid therethrough. Regarding claim 7, the reference is considered to anticipate the claimed limitation that the protrusion "extends only around a portion" of the second peripheral area, since this language reads on the protrusion extending around the entirety of the periphery as appears to be disclosed by the reference.

Thus, the instant claims are anticipated.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-4 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mao et al.

The reference is applied for the reasons stated above. However, the reference does not expressly teach that the securing member comprises an adhesive as recited in claim 2, or that the adhesive comprises an ethylene acrylic acid copolymer tape, as recited in claim 4. The reference

also does not expressly teach that the conductive members generally comprise a cylinder having an axis as recited in claim 8, that the volume comprises a first volume radially spaced from a second volume as recited in claim 9, or that the volume is sized larger than the protrusions as recited in claim 10.

However, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because each of these limitations would be rendered obvious by the reference. Regarding the recitation of an ethylene acrylic acid copolymer tape, the reference teaches this material for use in another embodiment of the invention in column 12, line 29. Thus, it would be well within the skill of the art to use this material as the “insulating” material of the embodiment of Fig. 3, and it would further provide an adhesion capability. Accordingly, this limitation would be rendered obvious.

Regarding the cylindrical shape of the conductive members, this limitation is also not considered to distinguish over the reference. The reference teaches planar, rectangular fuel cells. However, planar, cylindrical fuel cells are known in the art and are advantageously used in specific applications. Further, such changes in shape are generally not considered to distinguish over a reference (MPEP 2144.04). Thus, the claimed cylindrical shape is not considered to distinguish over the reference. Similarly, with regard to claim 10, it would be obvious to use a volume sized larger than the protrusion. The artisan would be sufficiently skilled to adjust the shapes of the volume and/or protrusion to affect greater sealing or provide more room for the adhesive. As such, this subject matter is not considered to distinguish over the reference.

Art Unit: 1745

Regarding claim 9, which recites two volumes spaced radially from each other, it would be obvious to incorporate a second protrusion and volume structure in the fuel cell of Mao et al. It has been generally held that the duplication of parts does not impart a patentable distinction over a reference (MPEP 2144.04). In this case, it would be obvious to add an additional protrusion/volume structure to increase the sealing capability of the periphery of the fuel cell.

Regarding claim 3, this claim is a product claim that recites the process by which the adhesion is carried out and is therefore given little patentable weight (MPEP 2113).

Conclusion


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Crepeau whose telephone number is (571) 272-1299. The examiner can normally be reached Monday-Friday from 9:30 AM - 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan, can be reached at (571) 272-1292. The phone number for the organization where this application or proceeding is assigned is (571) 272-1700. Documents may be faxed to the central fax server at (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 1745

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jonathan Crepeau
Primary Examiner
Art Unit 1745
June 15, 2007